14-500 Sediment & Nutrient Management in the L'Anguille River Watershed
St. Francis County Cost Share Project

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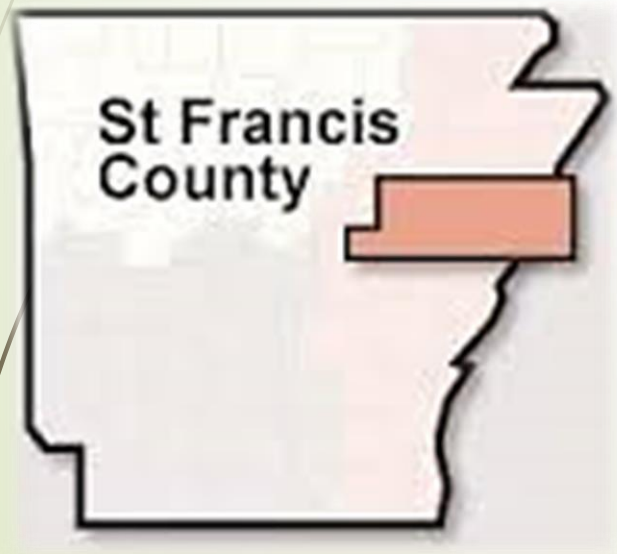
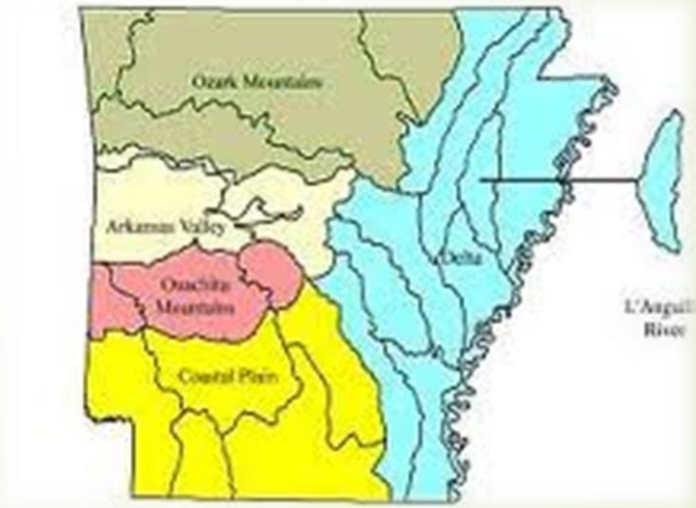
St. Francis County Conservation District

Project location – Lower L'Anguille River Watershed





Project Goals

- Assist producers in managing runoff from agricultural lands in the L'Anguille Watershed
- Introduce producers to core practices to avoid, control, and trap water pollutants
- Work closely with producers to select practices specific to their resource concerns
- Provide incentives to implement conservation practices
- Install core practices that will ensure proper application of nutrients & irrigation water
- Improve water quality by reduction of excessive runoff and trapping sediment and nutrients before they leave the field
- Implement practices on at least 30 farms in the project area

Resource Concerns in the L'Anguille Watershed

- Local Work Group
  - Soil Condition
  - Soil Erosion – Gully, Sheet, and Rill Erosion
  - Water Quality – Turbidity and harmful levels of pesticides in surface water
  - Water Quality – Turbidity and excessive nutrients and organics in surface water
  - Water Quantity
- L'Anguille River 9 Element Plan
  - Sedimentation and turbidity
  - Excessive groundwater consumption degrades flow conditions in the river during summer months

Project Objectives

- Conduct Annual Outreach Meeting
- Transfer Knowledge
  - Newsletters
  - Newspaper Articles
  - Radio Spots
  - Mail Outs
- Provide 40% Cost Share to Implement Practices
- Cost Incentive Payments for Specific Practices
- Reap Improved Water Quality Benefits

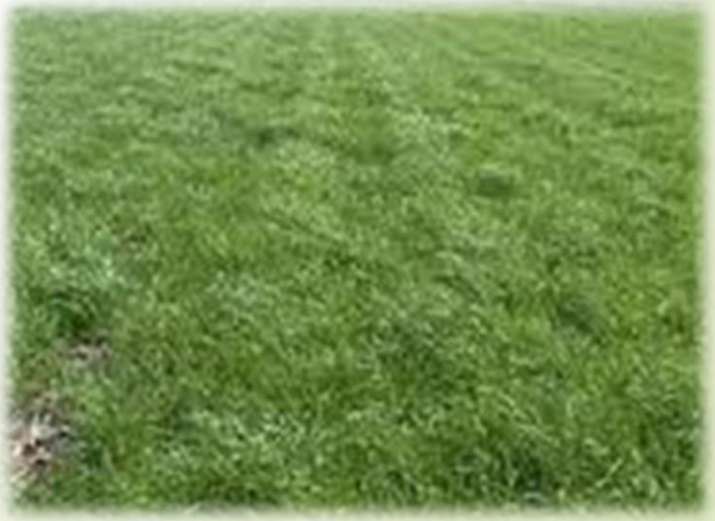
Project Funding

Federal dollars	Local match	Total
$252,848	$344,189	$597,037
Allocated to Date $38,231.06	Committed to Date $57,346.59	To Date $95,577.65

Core Practices of the Project

- Cover Crop – Avoiding
- Mulch Till – Controlling
- Filter Strips – Trapping
- Nutrient Management – Controlling
- Field Border – Controlling
- Grade Stabilization Structure
- Irrigation Water Conveyance
- Structure for Water Control – Controlling
- Shallow Water Management & Development - Trapping

Winter Cover Crops



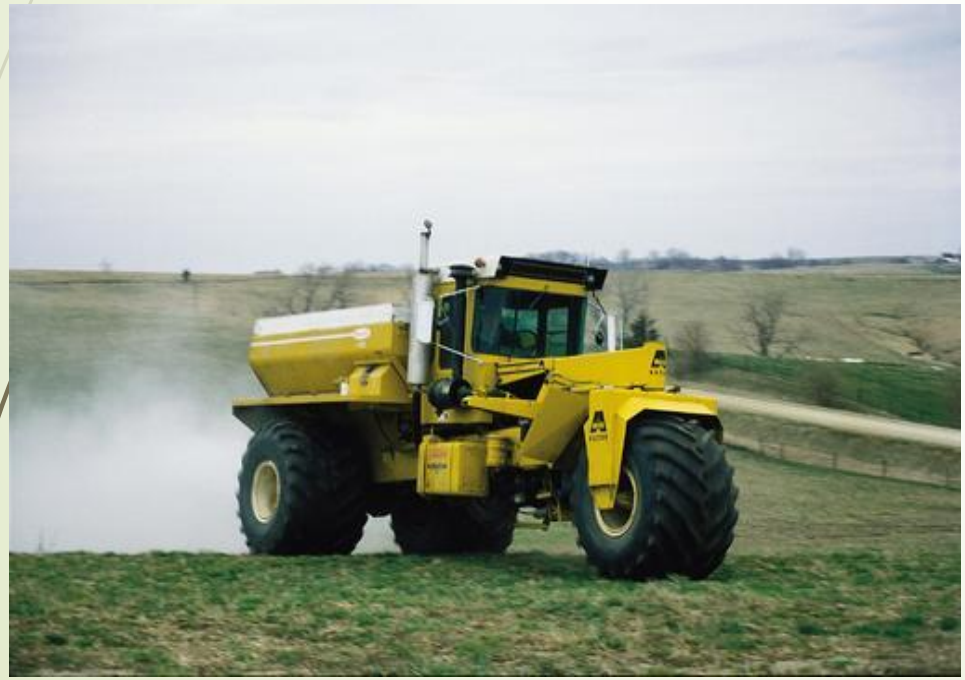
Mulch Till

A minimum of 30% of residue cover from the previous crop on the surface of the field after planting.

Filter Strips

Vegetated filter strip between the field and stream traps sediment and nutrients keeping them out of adjacent streams.

Nutrient Management
Grid Sampling & Variable Rate Application

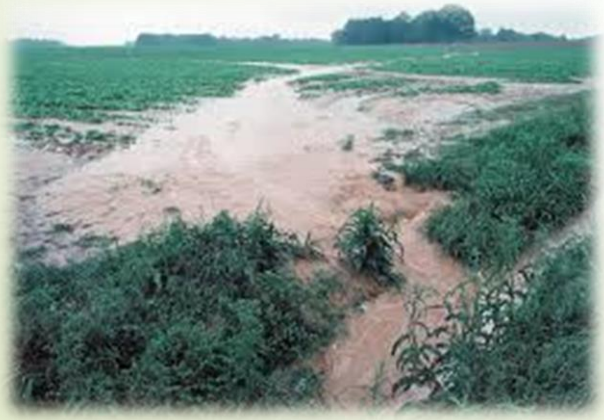


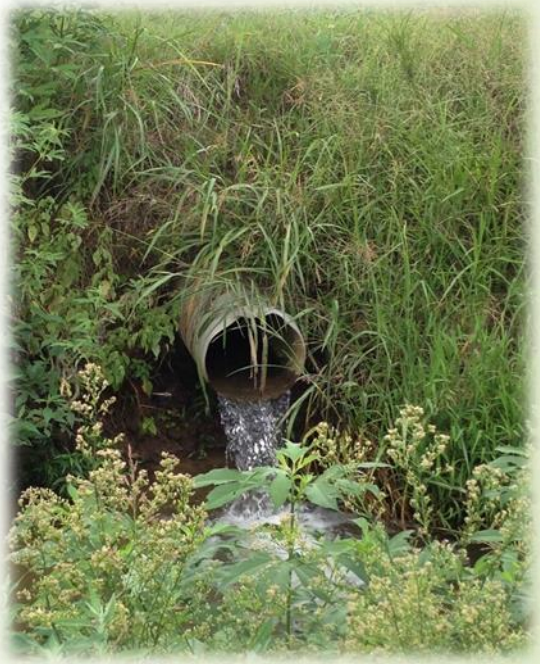
Grid sampling identifies the capacity of soil to supply adequate nutrients to a specific crop.

Variable rate application ensures that nutrients for optimum crop production are placed only where they are needed.

Drop Pipes & Water Control Structures

- Erosion & Gullies Form Along the edge of the field dumping Sediment laden runoff into ditches and streams





Irrigation Water Conveyance

Shallow Water Management

Leaving levees in place during winter months and delaying disking rice fields until Spring holds sediment and nutrients in place and provides wildlife habitat for birds.

Project progress

- 9 Applications Received to Date
- 8 Have Practices installed & Completed
  - 4 Drop Pipes
  - 3264 Feet of Irrigation Water Conveyance
  - 737 Acres Planted to Winter Cover Crop
  - 93 Acres Planted to Mulch Till
  - 93 Acres of Nutrient Management

Measures of Success

- Producers Willingness to:
  - Make Personal Investments in BMPs
  - Change Historical Farming Practices
  - Generate Interest in Other Producers
- Life Expectancy of Practices Insures Long Term Success
- Improved Water Quality
- Improved Soil Fertility

Appreciation . . . .

- Environmental Protection Agency 319 Program
- Arkansas Natural Resources Commission 319 Program
- USDA NRCs
- Our producers

Questions?